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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* RAYMOND NEFF,  
RAGHURAM GUMMARAJU,  
and THEODORE M. SMIECINSKI

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Appeal No. 2009-012426  
Application 10/606,825  
Technology Center 1700

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Decided: March 31, 2010

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Before EDWARD C. KIMLIN, CHUNG K. PAK, and PETER F. KRATZ,  
*Administrative Patent Judges.*

PAK, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's refusal to allow claims 1, 4, 5, 7 through 18, 20 through 24, 48, 51, 52, and 54 through 58, all of the claims pending in the above-identified application. *See* page 2 of the Appeal Brief ("App. Br.") filed January 22, 2008 and page

2 of the Reply Brief (“Reply Br.”) filed June 18, 2008. We have jurisdiction under 35 U.S.C. §§ 6 and 134.

#### STATEMENT OF THE CASE

The subject matter on appeal is directed to a viscoelastic polyurethane foam and a method of making the same. (*See, e.g.*, claims 1 and 48.). According to Appellants, their contribution relates to “a viscoelastic polyurethane foam having a density of from one to thirty pounds per cubic foot” and more particularly, “the viscoelastic polyurethane foam being formed of a composition having a chain extender” (Spec. 1, para. 0001). Appellants also state that the claimed glass transition temperature and peak tan delta properties are reflective of the polyurethane foam being viscoelastic. Specifically, the Specification, at page 6, paragraph 0020, of states in relevant part:

*Various properties are measured to determine whether the foam is viscoelastic. One property is a glass transition temperature of the foam. The glass transition temperature is determined through a dynamic mechanical thermal analysis (DMTA). The glass transition temperature is typically about 5 to 50 degree Celsius, preferably 10 to 40 degree Celsius, and more preferably 15 to 35 degree Celsius. The DMTA also produces a peak tan delta that indicates the ability of the foam to dissipate energy during a compression cycle and is related to a recovery time of the foam. The peak tan delta is about 0.3 to 1.8, preferably 0.4 to 1.75, and more preferably 0.9 to 1.5. The glass transition temperature and the peak tan delta result from vitrification of a soft segment phase of the foam. Vitrification manipulates the structure and composition of the soft segment phase so that the glass transition temperature approximately coincides with a use temperature of the foam, thereby maximizing the viscoelastic nature of the foam. [(Emphasis added.)]*

Details of the appealed subject matter are recited in representative claims 1 and 48 reproduced from the Claims Appendix to the Appeal Brief as shown below:

1. A viscoelastic polyurethane foam comprising a reaction product of:

an isocyanate component;

an isocyanate-reactive component comprising a flexible polyol and an ethylene-oxide rich polyol having an ethylene-oxide group content of from 40 to 95%;

said isocyanate component and said isocyanate-reactive component reacted at an isocyanate index of from 80 to 105;

a chain extender having a backbone chain with from two to eight carbon atoms and having two isocyanate-reactive groups and a weight-average molecular weight of from 25 to 250, wherein said chain extender is used in an amount of from 7 to 30 parts by weight based on 100 parts by weight of said foam; and

said foam having a glass transition temperature of from 5 to 65 degrees Celsius and a tan delta peak of from 0.40 to 1.75 and a density of from 2.5 pounds per cubic foot to 25 pounds per cubic foot.

48. A method of forming a viscoelastic polyurethane foam comprising the steps of:

providing an isocyanate component substantially free of flame retardant;

providing an isocyanate-reactive component comprising a flexible polyol and an ethylene-oxide rich polyol having an ethylene-oxide group content of from 40 to 95%;

providing a chain extender having a backbone chain with from two to eight carbon atoms and having two isocyanate-reactive groups and a weight-average molecular weight of from 25 to 250, wherein the chain extender is

used in an amount of from 7 to 30 parts by weight based on 100 parts by weight of the foam;

reacting the isocyanate component, the isocyanate-reactive component, and the chain extender at an isocyanate index of from 80 to 105 to form the foam having a tan delta peak of from 0.40 to 1.75 and having a density of from 2.5 pounds per cubic foot to 25 pounds per cubic foot; and

adjusting the amount of the chain extender to provide the foam with a glass transition temperature of from 5 to 65 degrees Celsius corresponding to a use temperature of the foam.

As evidence of unpatentability of the claimed subject matter, the Examiner relies on the following sole prior art reference at page 3 of the Answer. ("Ans.") dated April 18, 2008:

Lutter	5,420,170	May 30, 1995
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Appellants request review of the Examiner's § 103(a) rejection of claims 1, 4, 5, 7 through 18, 20 through 24, 48, 51, 52, and 54 through 58<sup>1</sup> as unpatentable over the disclosure of Lutter (App. Br. 4 and Reply Br. 3).<sup>2</sup>

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<sup>1</sup> Appellants argue claims 1 and 48 only and do not separately argue the other claims on appeal (App. Br. 17-22). Therefore, for purposes of this appeal, we select claims 1 and 48 to decide the propriety of the Examiner's § 103(a) rejection set forth in the Answer. See 37 C.F.R. § 41.37(c)(1)(vii) ("When multiple claims subject to the same ground of rejection are argued as a group by appellant, the Board may select a single claim from the group of claims that are argued together to decide the appeal with respect to the group of claims as to the ground of rejection on the basis of the selected claim alone.").

<sup>2</sup> The Examiner no longer maintains the § 103(a) rejections based on U.S. Patent 6,391,935 issued to Hager et al. or U.S. Patent 5,968,993 issued to Bleys set forth in the final Office action dated July 26, 2007. The Examiner also inadvertently includes cancelled claim 25 in the rejection based on Lutter set forth in the Answer.

Appellants traverse the Examiner's § 103(a) rejection, arguing that one of ordinary skill in the art would not have been led to employ the claimed amount of a chain extender to form the claimed viscoelastic polyurethane foam having a glass transition temperature of 5 to 65 degree Celsius (App. Br. 17-8 and 20-22 and Reply Br. 4-6 ). Appellants also contend that the Declaration executed by Raymond Neff, the inventor of the present application, on May 30, 2006 demonstrates that one of ordinary skill in the art would have been led away from employing the claimed amount of the claimed chain extender in forming a viscoelastic polyurethane foam (App. Br. 18-19). Appellants further contend that the Declaration demonstrates that the claimed invention imparts unexpected results (App. Br. 18-22 and Reply Br. 5-7).

#### ISSUES AND CONCLUSIONS

The first dispositive question is: Would one of ordinary skill in the art armed with the knowledge provided by Lutter have been led to employ the claimed amount of the claimed chain extender to form the claimed viscoelastic polyurethane foam having a glass transition temperature of 5 to 65 degree Celsius? On this record, we answer this question in the affirmative.

The second dispositive question is then: Have Appellants demonstrated that the Declaration relied upon shows that one of ordinary skill in the art would not have been led away from employing the claimed amount of the claimed chain extender in forming a viscoelastic polyurethane foam having a glass transition temperature of 5 to 65 degree Celsius contrary to the teachings of Lutter, thereby rebutting any prima facie case of

obviousness established by the Examiner? On this record, we answer this question in the negative.

The third dispositive question is then: Have Appellants demonstrated that the Declaration relied upon shows that the claimed subject matter imparts unexpected results, thereby rebutting any prima facie case of obviousness established by the Examiner? On this record, we answer this question in the negative as well.

### RELEVANT FACTUAL FINDINGS

The following relevant factual findings are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office):

1. Lutter exemplifies forming a viscoelastic polyurethane foam comprising a reaction of product of 72.8 parts by weight of a polyoxypropylene-polyoxyethylene-polyol containing 75% by weight of oxyethylene units, 18.7 parts by weight of a block polyoxypropylene-polyoxyethylene-polyol, 2.8 parts by weight of ethylene glycol (chain extender), 2.6 parts by weight of water, 3.1 parts by weight of other additives, and 59 parts by weight of an isocyanate, corresponding to an NCO index of 95 (col. 14, ll. 29-68, Example 3).
2. Lutter also exemplifies forming a viscoelastic polyurethane foam having a density from 70 g/liter to 77g/liter in Examples 5 through 8 using Example 3 discussed above, except replacing 2.8 part by weight ethylene glycol (chain extender) with 6 parts by weight of other chain extenders, i.e., 6 parts by weight of 1,3-propanediol in Example 5, 1,4-butanediol in

Example 6, 1,6-hexanediol in Example 7, and 1,7-heptanediol in Example 8 (col. 15, ll. 40-63).

3. Lutter teaches that in order to modify the mechanical properties of the flexible, viscoelastic, soft polyurethane foam, it is expedient to employ suitable difunctional and trifunctional chain extenders having molecular weights of from 18 to approximately 400, such as 1,3-propanediol, 1,4-butanediol, 1,6-hexanediol, and 1,7-heptanediol (col. 8, ll. 50-67).

4. Lutter teaches that the chain extender can be used in an amount of from 1 to 60 parts by weight per 100 parts by weight of the polyoxyalkylene-polyol mixture (col. 9, ll. 15-20).

5. Appellants do not dispute the Examiner's finding that Lutter's polyols, isocyanate, and chain extenders correspond to the claimed polyols, isocyanate, and chain extender, respectively. (*Compare* Ans. 3 with App. Br. 17-23 and Reply Br. 4-8).

6. Appellants do not dispute the Examiner's finding that Lutter's viscoelastic polyurethane foam has densities within the claimed range. (*Compare* Ans. 3 with App. Br. 17-23 and Reply Br. 4-8).

7. The Specification, at page 6, paragraph 0020, states in relevant part:

*Various properties are measured to determine whether the foam is viscoelastic.* One property is a glass transition temperature of the foam. The glass transition temperature is determined through a dynamic mechanical thermal analysis (DMTA). The glass transition temperature is typically about 5 to 50 degree Celsius, preferably 10 to 40 degree Celsius, and more preferably 15 to 35 degree Celsius. The DMTA also produces a peak tan delta that indicates the ability of the foam to dissipate energy during a compression cycle and is related to a recovery time of the foam. The peak tan delta is about 0.3 to 1.8, preferably 0.4 to 1.75, and more preferably 0.9 to 1.5. The glass transition temperature and the peak tan delta result from



vitrification of a soft segment phase of the foam. Vitrification manipulates the structure and composition of the soft segment phase so that *the glass transition temperature approximately coincides with a use temperature of the foam*, thereby maximizing the viscoelastic nature of the foam. [(Emphasis added.)].

8. According to Appellants at page 6 of the Specification and page 8 of the Declaration of record, the foam use temperatures in general, inclusive of those taught by Lutter, approximately coincide with the foam glass transition temperatures.

9. The Declaration alleges that Example 6 of Lutter produced a polyurethane foam having a glass transition temperature of 52 °C, which is within the claimed glass transition temperature range of from 5 to 65 degrees Celsius (pp. 2 and 3).

10. The Declaration does not show that soft polyurethane foams having the claimed glass transition temperature of from 5 to 65 degrees Celsius do not have viscoelastic properties (pp. 1-20).

11. The Declaration does not show that Lutter's Examples 5, 7, and 8 employing 6 parts by weight of chain extenders different from that employed in Example 6, but within the broadly claimed chain extender, do not produce soft polyurethane foams having viscoelastic properties, inclusive of the claimed glass transition temperature (*id.*).

12. The Declaration does not show that Lutter's soft polyurethane foams in Examples 5, 6, 7, and 8 produced with 7 or higher parts by weight of chain extenders as suggested at column 9 of Lutter do not provide viscoelastic properties, inclusive of the claimed glass transition temperatures (*id.*).

13. The Declaration's Table 2 shows that soft polyurethane foams having viscoelastic properties were formed even when the claimed chain extender taught by Lutter is used in an amount ranging from 0 to 30 parts by weight (p. 8).

14. While the Declaration is limited to a few specifically prepared polyurethane foams from specific reaction products containing the specific proportions of specific isocyanate components, specific polyol mixtures, and specific chain extenders, the claims on appeal are not so limited. (*Compare* the Declaration, pp. 2-20 *with* claims 1 and 48).

15. The claims on appeal include the amounts, types, and preparation conditions of foam ingredients (isocyanate components, polyol mixtures, and chain extenders), which are materially different from those shown in the Declaration. (*Compare* the Declaration, pp. 2-20 *with* claims 1 and 48).

16. Appellants do not direct us to any comparison in the form of experiments between the claimed invention against the closest prior art reference, Lutter, wherein the actual difference (i.e., the amount of a chain extender) is shown to impart unexpected results. (*See* the Declaration, pp. 2-3).

17. Where, as here, the foam reaction products exemplified in the Declaration supposedly representative of the claimed and prior art foam reaction products contain different amounts of different ingredients (i.e., different isocyanate components, polyol mixtures, and chain extenders), it cannot be ascertained from the Declaration whether the alleged unexpected improvement is due to the amounts and types of ingredients employed or the alleged amount of the claimed chain extender (*id.*).

18. Nowhere does the Declaration show that Lutter's Example 6 produced a polyurethane foam inferior to those claimed (*id.*).
19. The Declaration does not compare Lutter's Examples 5, 7, and 8 with the claimed invention (pp. 2-20).
20. The Declaration does not establish that Lutter's Example 6 is closer to the claimed invention than Lutter's Examples 5, 7, and 8 (pp. 2-3).

### PRINCIPLES OF LAW

The Supreme Court of the United States reaffirmed the § 103 obviousness analytical framework set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966), which requires a determination of: (1) the scope and content of the prior art; (2) the differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) secondary considerations, if necessary. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007).

The Supreme Court in *KSR Int'l. Co. v. Teleflex Inc.*, 550 U.S. at 418 also instructs us that:

[A]nalysis [of whether the subject matter of a claim would have been obvious under § 103] need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can *take account of the inferences and creative steps that a person of ordinary skill in the art would employ*. [(Emphasis added.)].

*See also In re Bozek*, 416 F.2d 1385, 1390, (CCPA 1969) ("Having established that this knowledge was in the art, the examiner could then properly rely, as put forth by the solicitor, on a conclusion of obviousness 'from common knowledge and common sense of the person of ordinary skill

in the art without any specific hint or suggestion in a particular reference.””). The level of ordinary skill in the art is best reflected by the teachings of the prior art, inclusive of the admittedly known prior art. *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (approving the Board’s approach that the level of skill in the art was best determined by the references of record).

It is well settled that a published U.S. patent enjoys a presumption of validity and operability. 35 U.S.C. § 282; *University of Rochester v. G.D. Searle & Co., Inc.*, 358 F.3d 916, 920 (Fed. Cir. 2004); *In re Spencer*, 261 F.2d 244, 246 (CCPA 1958). This presumption can only be overcome by clear and convincing evidence. *Nat’l Recovery Techs., Inc. v. Magnetic Separation Sys., Inc.*, 166 F.3d 1190, 1195 (Fed. Cir. 1999); *G.D. Searle & Co., Inc.*, 358 F.3d at 920. The burden of proving a prior art patent invalid for inoperability rests on Appellant. *Spencer*, 261 F.2d at 246.

A showing of unexpected results may be sufficient to overcome a *prima facie* case of obviousness. *In re Dillon*, 919 F.2d 688, 692-93 (Fed. Cir. 1990) (internal citations omitted). Our reviewing court has emphasized repeatedly that “[i]t is well settled that unexpected results must be established by factual evidence. Mere argument or conclusory statements in the specification does not suffice.” *In re De Blauwe*, 736 F.2d 699, 705 (Fed. Cir. 1984), *quoted with approval in In re Soni*, 54 F.3d 746, 750 (Fed. Cir. 1995). However, the burden of analyzing and explaining data to support nonobviousness rests with Appellant. *In re Klosak*, 455 F.2d 1077, 1080 (CCPA 1972).

## ANALYSIS

Appellants do not dispute the Examiner's finding at page 3 of the Answer that Lutter, like Appellants, is directed to viscoelastic polyurethane foams having the claimed densities. Nor do Appellants dispute the Examiner's finding at page 3 of the Answer that Lutter describes forming such viscoelastic polyurethane foams from a reaction of product of an isocyanate corresponding to the claimed isocyanate component, a polyoxypropylene-polyoxyethylene-polyol containing 75% by weight of oxyethylene units corresponding to the claimed ethylene-oxide rich polyol, a block polyoxypropylene-polyoxyethylene-polyol corresponding to the claimed flexible polyol and a difunctional or trifunctional chain extender, such as ethylene glycol, 1,3-propanediol, 1,4-butanediol, 1,6-hexanediol, and 1,7-heptanediol, corresponding to the claimed chain extender. Rather, Appellants contend at pages 17 through 22 of the Appeal Brief and pages 4 through 6 of the Reply Brief that Lutter would not have led one of ordinary skill in the art to employ the claimed amount of such chain extender to form the claimed viscoelastic polyurethane foam having a glass transition temperature of 5 to 65 degree Celsius. We do not agree.

As indicated *supra*, Lutter teaches using the claimed chain extender to obtain the desired mechanical properties of a flexible, viscoelastic, soft polyurethane foam. Lutter also teaches employing the claimed chain extender in amounts of from 1 to 60 parts by weight per 100 parts by weight of the polyol mixture, which based on the total amount of the polyol mixture and reaction product employed in Example 3, translates into about 0.57 to 34.5 parts by weight of the chain extender per the 100 parts of the reaction product. In other words, Lutter not only teaches that the amount of the

claimed chain extender employed is a result effective variable in terms of obtaining the desired mechanical properties of a flexible, viscoelastic, soft polyurethane foam, but also teaches a range of the amounts of the chain extender employed that substantially overlaps with the range claimed. Thus, we concur with the Examiner that the employment of the optimum or workable amount of the claimed chain extender, such as those claimed, in forming a flexible, viscoelastic, soft polyurethane foam is well within the ambit of one of ordinary skill in the art. *In re Boesch*, 617 F.2d 272, 276 (CCPA 1980)(“[D]iscovery of an optimum value of a result effective variable . . . is ordinarily within the skill of the art.”); *In re Peterson*, 315 F.3d 1325, 1329 (Fed. Cir. 2003) (“In cases involving overlapping ranges, we and our predecessor court have consistently held that even a slight overlap in range establishes a *prima facie* case of obviousness.”); *In re Ornitz*, 351 F.2d 1013, 1016 (CCPA 1965) (When there is a substantial overlap between the claimed ranges of elements and the ranges disclosed in a reference, the claim is held to have no patentable novelty over the prior art.).

As to the claimed glass transition temperature and tan delta peak properties, Appellants state at page 6 of the Specification that for polyurethane foams to be viscoelastic as is in Lutter’s, they must necessarily possess the claimed glass transition temperature and tan delta peak. In other words, Lutter’s viscoelastic polyurethane foam necessarily possesses the claimed glass transition temperature and tan delta peak properties. In any event, they would have naturally flowed from following the suggestion of Lutter of employing the claimed ingredients to form a flexible, viscoelastic, soft polyurethane foam. *In re Papesch*, 315 F.2d 381, 391 (CCPA 1963) (“a

compound and its properties are inseparable”); *see also Ex parte Obiaya*, 227 USPQ 58, 60 (BPAI 1985).

Appellants contend (App. Br. 19) that:

Specifically, the foams were prepared in accordance with Example 6 [of Lutter] having the chain extender present in an amount of 6 parts by weight. The resultant foam had a glass transition temperature of 52 °C. Foams having such a high glass transition temperature become rigid and no longer have viscoelastic properties, as set forth in the Declaration. Further, based upon the findings presented in the Declaration and in view of the subject invention, increasing the amount of the chain extender would *further increase* the glass transition temperature resulting in the foam becoming more rigid, i.e., beyond claimed results of the subject application. Therefore, one of ordinary skill in the art, without relying upon impermissible hindsight, would not be motivated to increase the amount of chain extender to arrive at the claimed invention based upon the disclosure of Lutter et al.

However, Appellants’ contention is not supported by the Declaration of record or the teaching of Lutter. First, Lutter actually teaches forming flexible, soft polyurethane foams having *viscoelastic* properties in a temperature range of from -20°C. to 80°C. by employing the claimed chain extender in amounts which substantially overlap with those claimed. One of ordinary skill in the art following the instruction provided by Lutter, without any hindsight, would have been led to use the claimed amounts of the claimed chain extender in forming Lutter’s soft polyurethane foams having viscoelastic properties, inclusive of the claimed glass transition temperature. This is especially true in this case since there is a reasonable basis to conclude that Lutter’s viscoelastic, soft polyurethane foams also have a glass transition temperature of between approximately -20°C. and 80°C, inclusive

of the claimed glass transition temperature range of from 5 to 65 degrees Celsius, since the foam use temperatures in general, inclusive of those taught by Lutter, according to page 6 of the Specification and page 8 of the Declaration, approximately coincide with the foam glass transition temperatures.

Second, the Declaration only alleges that Example 6 of Lutter produced a polyurethane foam having a glass transition temperature of 52 °C, which is within the claimed glass transition temperature range of 5 to 65 degrees Celsius. The Declaration does not show that soft polyurethane foams having the claimed glass transition temperature of from 5 to 65 degrees Celsius do not have viscoelastic properties. Nor does the Declaration show that Lutter's Examples 5, 7, and 8 employing 6 parts by weight of the claimed chain extenders, different than that used in Example 6, or the same examples employing 7 or higher parts by weight of the claimed chain extenders as suggested at column 9 of Lutter do not produce soft polyurethane foams having viscoelastic properties, inclusive of the claimed glass transition temperature. In fact, Table 2 at page 8 of the Declaration shows that soft polyurethane foams having viscoelastic properties were expected even though the claimed chain extender taught by Lutter is used in an amount ranging from 0 to 30 parts by weight. The Declaration does not demonstrate that one of ordinary skill in the art would have been led away from employing the claimed amount of the claimed extender in forming soft polyurethane foams having viscoelastic properties, inclusive of the claimed glass transition temperatures, contrary to the teachings of Lutter.

Appellants rely on the Declaration to show that the claimed invention imparts unexpected results. However, Appellants' reliance on the



Declaration does not demonstrate that all the claimed polyurethane foams covered by claims 1 and 48 impart unexpected results. While the Declaration is limited to a few specifically prepared polyurethane foams from specific reaction products containing the specific proportions of specific isocyanate components, specific polyol mixtures, and specific chain extenders, the claims on appeal are not so limited. The claims on appeal include the amounts, types, and preparation conditions of foam ingredients, which are materially different from those shown in the Declaration. Yet, Appellants have not shown, much less sufficiently explained, why such limited showing is reasonably commensurate in scope with the degree of protection sought by the claims on appeal. *In re Grasselli*, 713 F.2d 731, 743 (Fed. Cir. 1983); *In re Clemens*, 622 F.2d 1029, 1035 (CCPA 1980).

Appellants' reference to *In re Chupp*, 816 F.2d 643, 646 (Fed. Cir. 1987) does not explain why the limited showing in the Declaration is reasonably commensurate in scope with the claimed invention. *Chupp* stands for a proposition that a compound can be patented on the basis of its at least one unexpected property in a single environment. *Id.* Nowhere does *Chupp* indicate that the claimed thousands of foams or compounds rendered *prima facie* obvious by a prior art reference can be patented based on the property of one or a few of the claimed multifarious foams. *Id.*

Appellants' reliance on the Declaration as demonstrating unexpected results is also not probative since it cannot be ascertained from the Declaration what actually caused the alleged unexpected improvement. In particular, Appellants do not direct us to any comparison in the form of experiments between the claimed invention against the closest prior art reference, Lutter, wherein the actual difference (i.e., the amount of the

claimed chain extender) is shown to impart unexpected results. Where, as here, the foam reaction products exemplified in the Declaration supposedly representative of the claimed and prior art foam reaction products contain materially different amounts of different ingredients, it cannot be ascertained from the Declaration whether the alleged unexpected improvement is due to the amounts and types of ingredients employed or the alleged amount of the claimed chain extender. See *In re Dunn*, 349 F.2d 433, 439 (CCPA 1965) ("While we do not intend to slight the alleged improvements, we do not feel it an unreasonable burden on appellants to require comparative examples relied on for non-obviousness to be truly comparative. The cause and effect sought to be proven is lost here in the welter of unfixed variables.").

Appellants' reliance on the Declaration as showing unexpected results over the closest prior art, Lutter, is misplaced. First, the Declaration only shows that Lutter's Example 6 produced a polyurethane foam having the claimed glass transition temperature. Nowhere does the Declaration show that Lutter's Example 6 produced a polyurethane foam inferior to those claimed. Second, the Declaration does not compare Lutter's Examples 5, 7, and 8 with the claimed invention. The Declaration does not establish that Lutter's Example 6 is closer to the claimed invention than Lutter's Examples 5, 7, and 8. *In re Baxter Travenol Labs.*, 952 F.2d 388, 392 (Fed. Cir. 1991) ("[W]hen unexpected results are used as evidence of nonobviousness, the results must be shown to be unexpected compared with the closest prior art.").

It follows that Appellants, on this record, have not carried their burden of showing that the claimed invention as a whole imparts unexpected results relative to the closest prior art or that one of ordinary skill in the art is taught

away from employing the claimed amount of the claimed chain extender in forming a polyurethane foam having viscoelastic properties. The Examiner's view concerning the insufficiency of the proffered evidence is supported by the record.

Accordingly, based on the totality of record, including due consideration of Appellants' arguments and evidence, we determine that the preponderance of evidence weighs most heavily in favor of obviousness within the meaning of 35 U.S.C. § 103.

#### ORDER

In view of the foregoing, the decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

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